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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,047	07/29/2004	Yasuo Ibuki	P25723	2453

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EXAMINER

MICHALSKI, SEAN M

ART UNIT	PAPER NUMBER
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3724

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	02/21/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/21/2007.

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Office Action Summary	Application No. 10/502,047	Applicant(s) IBUKI ET AL.	
	Examiner Sean M. Michalski	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 November 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1. ☒ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The objection to the abstract is hereby withdrawn.

Drawings

2. The corrections to the drawings are accepted and the drawings are entered.

Claim Rejections - 35 USC § 112

3. The rejection of claims 2 and 4 in view of 112 2nd is moot, in view of their cancellation.
4. The rejection of claim 3 in view of 112 2nd is withdrawn in view of applicants amendment.
5. The rejections of claims 6,8,9,10 and 14 for antecedent basis problems are withdrawn in view of applicants amendments.
6. The Rejection of claim 14 for all other 112 issues is also withdrawn.
7. The rejection of claim 12 under 35 USC 112 2nd is maintained. The Claim is still replete with errors. The structure and phrasing of the limitations (all of which are functional limitations) serves to inhibit even the most rudimentary understanding of what applicant is claiming. The claim does not make sense. The recitation in lines 3-4 "and the driving amplitude of the inner blade at the time of turning on of the switch smaller than the corresponding one in the normal drive mode" makes no sense. What is being compared by the recitation "smaller" and what does "corresponding one" refer to? These limitations are indefinite. Also, it is unclear what the final two lines mean, "and in response to turning off of the switch". *What* is in response? The claim is indefinite. It

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also appears there are functional alternatives in the claim, If 'one state' then 'some function', if 'some other state' then 'some other function', but the recitation "the length of time that the switch has been turned on" in lines 5-6 and line 8 is without antecedent basis. A razor does not have inherently a length of time that it has been turned on, rather a method of using a razor may have a length of time, or a controller may determine a length of time, or a length of time may be defined as starting when some event occurs. These are legitimate ways to claim a length of time, but reciting 'the length of time' without defining a scope is practically meaningless. "the switch" in claim 12 is without antecedent basis, and so the definition of the length of time as beginning upon the action of an improperly claimed element is ineffective. The claims currently show no switch being present, so how can the length of time be dependent on it's activation. Examination with regards to the prior art will be effected as the claim is best understood by examiner.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 5-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Van der Borst et al. (USPN 5,671,535).

Van Der Borst et al. discloses a shaving apparatus (figure 1) having moving inner blades and stationary outer blades that cooperate to nip whisker hairs from faces. The

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Electric razor as disclosed has three settings, 'P', 'M', and 'C', each of which has a different blade movement speed function. See column 14 lines 20-50. The movement speed may also be referred to as 'the number of revolutions per unit time', or 'driving frequency'. Mode P may be called a 'normal mode' and mode C may be called a cleaning mode, since the device is capable of being cleaned in mode C. Van der Borst discloses a controller (205, 207 in conjunction with control unit 43, 403, 203 are considered a controller) which operatively changes the driving mode between the various pre-selected modes (P, C, M each of which has a different blade movement speed function. See column 14 lines 20-50).

The limitation "a driving portion that drives either or both the inner blade and the outer blade:" is met by the driving portion 35 figure 2, since this driving portion drives the inner blade. The alternative limitation "either or both" means that a single showing anticipates the claim, just as in traditional Markush phrasing.

Regarding claim 5, Van Der Borst et al. discloses that there are multiple drive modes that are the cleaning mode. Both mode M and mode C are cleaning modes, and both are differentiated from the normal mode in the number of revolutions and driving frequency. Both M and C are driven with different functions (that is, different controllers) so their motor speeds and driving frequencies are different than the corresponding ones of the normal mode (mode P).

Regarding claim 6, Van Der Borst et al. discloses that the razor is operated in response to the turning on of a switch (61 figure 1) and that the mode of the razor is

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capable of being switched from the P mode to the cleaning mode (C or M) after a predetermined time. This is accomplished by a user waiting a predetermined time in the "ON-state" and then using 207 figure 1 to change into cleaning mode. The switch 61 stays in the on-position while the razor goes into a cleaning mode after a predetermined time.

Regarding claim 7, Van Der Borst et al. discloses that the moving blade (the inner driven blade) *may be suspended* (stopped, the blade is capable of being stopped) after the blade is driven in the cleaning drive mode for a predetermined time. A user may simply drive the blade in the cleaning drive mode C for a predetermined time (say 5 minutes) and then use switch 61 to 'suspend' the blade.

Regarding claim 8, Van Der Borst et al. discloses that the user may first select the cleaning mode C for operation of the razor, and then drive the blade for a first duration, say 1 minute, suspend the motion of the blade by utilizing the switch 61, allow a second duration to pass (with the blade suspended), say 10 hours, and then resume the motion of the blade, again by toggling the switch 61.

Regarding claim 9, Van Der Borst et al. discloses that the second activation of the blade may be differentiated from the first activation of the blade by (during the second duration, during which the blade is motionless) moving the selector from C to the alternate cleaning mode M, where the speed and frequency of the blade will differ from the original mode.

Regarding claim 10, Van Der Borst et al. discloses that the second cleaning mode consists of having the blade driven with fewer revolutions. If the user had the first

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driven time be 5 hours, and the second activation be 1 hour in the same mode there would be fewer revolutions. Similarly, but alternatively, the user may have the first cleaning mode be M, and after the second duration (the pause in activation of the moving blade) re-activate the razor in C mode, which will drive at a smaller frequency and have a lower number of rotations *per unit time*.

Regarding claim 11, Van Der Borst et al. discloses that after the blade is driven in cleaning mode for a third (or fourth or any subsequent number of durations) it may be suspended. Again, this is accomplished by toggling the switch 61.

Regarding claim 12, The claim is unclear in many regards, as treated in the Rejection under 112 2nd, however examiner *believes* that applicant is attempting to claim a razor *capable* of being cleaned in a certain mode (the mode being defined essentially by motor speed or speed of the driven blade) when a measured time period has elapsed, and until that time period elapses, the razor is driven in normal mode (mode again is a function of the speed of the driven blade/motor). Van Der Borst is inherently capable of performing as applicant has recited. A user can turn the razor on in mode "M" for 5 minutes, and when 5 minutes has elapsed, the user may switch the razor into "C" mode and use that mode to clean the razor, by putting the blades under water, blowing on the blades, shaking the razor vigorously, or whatever cleaning method the user decides to implement during the cleaning mode. This capability to so perform meets all of the functional limitations which are discernable in the claim.

Regarding claim 13, Van Der Borst et al. discloses that there are "notifying means that notify" for notifying a user that the electric razor is operated in the cleaning

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drive mode. The notifying means are the letters M and C seen in figure 2. The letters in conjunction with 207 *notify the user* of the cleaning drive mode the razor is set to.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Der Borst et al.

Regarding claim 3, Van Der Borst et al. discloses every aspect of the invention except the limitation that the speed of the blade is between 20 and 60 meters per minute. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select a range of appropriate speeds for the blades to operate within, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). The motivation to find an appropriate blade speed is that blade speed affects comfort and efficiency (see Dekker). This limitation lacks unexpected results.

Regarding claim 5, Van Der Borst et al. does not disclose that the speed of the cleaning mode is different than the speed of the normal mode, as recited. Van Der Borst et al. teaches multiple modes, some being driven faster than others; see column 14. It

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would have been obvious to one having ordinary skill in the art at the time the invention was made to select a range of appropriate speeds for the blades to operate within, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Furthermore there is a lack of criticality and unexpected results to this limitation, since applicant has not provided any evidence that this is necessary.

12. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Der Borst et al. in view of Orloff (USPN 6,460,251).

Regarding claim 14, Van Der Borst et al. discloses that there are indicating means (a differentiator, which indicated to the motor when certain time events have occurred), that are operable during all drive modes including normal (P is normal), said means being capable of prompting the user to clean the blade if certain time events occur. If the operation or the razor is altered by given time events, (see column 8 lines 60+) this would be detected by a user and would prompt said user to take action, including cleaning the razor. Van Der Borst et al. discloses a differentiator and comparator control circuit for the monitoring of elapsed time. Time is a known factor in determining blade efficiency/usefulness as indicated by Van Der Borst using "Ut" in the control of the blade speeds (blade 'frequency').

Van Der Borst does not teach using a visual indicator to alert user that it is time to clean the blades, it merely modifies the performance of the blades in response to elapsed time, which does indicate to a user that the blades need to be cleaned. A user

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can hear the difference in operation, and less objectively, feel a difference in blade speeds that indicate to a user to clean the blades.

Orloff teaches a visual indicator (LED light) which is presented when the blades are determined to be worn, and need to be replaced.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a visual indicator as taught by Orloff, such as an LED light or sound indicator to indicate to user when a certain time had elapsed. Indicators are used throughout the prior art to indicate when shaving blades are in need of replacement which occurs after a certain amount of time.

13. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Der Borst et al. in view of Dekker (EP 0 652 087 A1, cited by applicant).

Van Der Borst et al. discloses every aspect of the invention except the limitation that the speed of the blade is between 20 and 60 meters per minute.

Dekker discloses a blade speed for a cutter as between 0.4 and 1.2 m/s which is known to be between 24 and 72 meters per minute: this overlaps the claimed range of between 20 and 60 m/m. Where the claimed range overlaps or lies within a prior art reference a prima facie case of obviousness exists. See *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976).

In the same field of invention it would have been obvious to one skilled in the art at the time of the invention to modify Van Der Borst et al. by limiting the blade speed to

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between 24 and 72 m/min. as taught by Dekker. The motivation to combine is that this range is determined to "improve the shaving performance" (see Dekker Abstract).

Response to Arguments

14. Applicant's arguments filed 11/27/2006 have been fully considered but they are not persuasive.

Applicants contention that Van Der Borst does not have a cleaning mode is incorrect, since the mode examiner has designated is fully capable of being cleaned during that modes operation. The recitation "cleaning mode" *per se* implies no structure or function other than that clearly shown in Van der Borst. The cleaning may be effected, as examiner has argued, while the apparatus is in mode C, for example: by blowing on the cutter head. Applicants claim does not define over the prior art in this regard. The allegation that a shaving setting may not *also* be a cleaning setting is not supported.

The allegation that Van der Borst does not disclose a controller which controls one of the driving frequency, revolutions per time or blade amplitude, is incorrect. See Control unit 43, 103, 203 as cited by the abstract "controls the speed of the motor" in accordance with fuzzy logic and elements 205 and 207 control the controller. Control of the motor effects control of the variables cited by applicant, unquestioningly RPM (rotations per minute, minutes being unit time measurements). Again, applicants claim recites "at least one of" meaning that a showing of ONE of the alternative limitations

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anticipates the claim. The recitation "a controller..." has nearly no structural limitation and is fully functionally met by the indicated elements.

The allegation that the above reasons make the remaining rejections of claims 6-11 and 13 moot is not persuasive, since Van Der Borst does in fact anticipate claim 1.

While it is appreciated that examiner is making the combination Van Der Borst in view of Dekker, the motivation being to improve shaving efficiency. The use of a motivation different from applicants does not overcome the prima facie showing of obviousness. The range disclosed is good for shaving (reason to combine), and the razor is *capable of being cleaned* during that mode/ at that speed (claimed element). The propriety of the rejection is not altered merely because applicant has found a new use for old or obvious elements, or is using an obvious invention for a new use. Examination of apparatus claims does not give patentable weight to functional elements; the *structure* which is claimed, so long as the structure is *capable* of performing the claimed functions, serves to render the claims unpatentable.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean M. Michalski whose telephone number is 571-272-6752. The examiner can normally be reached on M-F 7:30AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SMM


KENNETH E. PETERSON
PRIMARY EXAMINER